Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-3 (cancelled)

4. (new) A method of determining a capillary pressure curve of rocks of an underground reservoir from measurements on cuttings taken therefrom, by measuring a permeability of cuttings, comprising:

measuring the capillary pressure curve as a function of saturation by subjecting the cuttings, initially saturated with a fluid, to centrifugation; and

parametrizing the capillary pressure curve satisfying empirical relations depending on adjustable parameters, constrained to an asymptotic part of the capillary curve measured by centrifugation, and to a value of the permeability measured on the cuttings, so as to obtain a capillary pressure curve.

5. (new) A method as claimed in claim 4, comprising:

selecting by default a set of the parameters allowing calibration on an asymptotic part of the capillary pressure curve and modifying parameters so that an estimation of the permeability given by one of the empirical relations is adjusted with permeability measurements carried out on the cuttings with the asymptotic part.

6. (new) A method as claimed in claim 4, wherein the permeability of the cuttings is measured from measurements of pressure variations in a vessel filled with a fluid containing the cuttings after the vessel has been coupled for a predetermined period of time to a source of fluid containing the cuttings under pressure, a volume absorbed by the cuttings, and modelling an evolution of the pressure or of the volume of the vessel, from initial values selected for a physical parameters of the cuttings, which are iteratively adjusted so that a modelled pressure evolution adjusts with a measured evolution of the physical parameters of the cuttings.

7. (new) A method in accordance with claim 4 wherein:

the asymptotic part has low saturation.

8. (new) A method in accordance with claim 5 wherein:

the asymptotic part has low saturation.

9. (new) A method in accordance with claim 6 wherein:

the asymptotic part has low saturation.

10. (new) A method in accordance with claim 4 wherein the modelled pressure evolution best adjusts with a measured evolution of physical parameters of the cuttings.

11. (new) A method in accordance with claim 5 wherein the modelled pressure evolution best adjusts with a measured evolution of physical parameters of the cuttings.

12. (new) A method in accordance with claim 6 wherein the modelled pressure evolution best adjusts with a measured evolution of physical parameters of the cuttings.

13. (new) A method in accordance with claim 7 wherein the modelled pressure evolution best adjusts with a measured evolution of physical parameters of the cuttings.

14. (new) A method in accordance with claim 8 wherein the modelled pressure evolution best adjusts with a measured evolution of physical parameters of the cuttings.

15. (new) A method in accordance with claim 9 wherein the modelled pressure evolution best adjusts with a measured evolution of the physical parameters of the cuttings.

16. (new) A method in accordance with claim 4 wherein a whole capillary pressure curve is obtained.

17. (new) A method in accordance with claim 5 wherein a whole capillary pressure curve is obtained.

18. (new) A method in accordance with claim 6 wherein the source of fluid is a tank.

19. (new) A method in accordance with claim 7 wherein the source of fluid is a tank.

20. (new) A method in accordance with claim 8 wherein the source of fluid is a tank.

21. (new) A method in accordance with claim 9 wherein the source of fluid is a tank.

22. (new) A method in accordance with claim 10 wherein the source of fluid is a tank.

23. (new) A method in accordance with claim 11 wherein the source of fluid is a tank.